



1637

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FIFTH SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT  
Examining Group 1637  
Patent Application  
Docket No. G-101US05REG  
Serial No. 10/051,681

Frank C. Eisenschenk

Frank C. Eisenschenk, Ph.D., Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Kenneth R. Horlick  
Art Unit : 1637  
Applicants : Daniel Cohen, Ilya Chumakov  
Serial No. : 10/051,681  
Filed : January 16, 2002  
Conf. No. : 1458  
For : Treatment of CNS Disorders Using D-Amino Acid Oxidase and D-Aspartate Oxidase Antagonists  
Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§1.97 AND 1.98

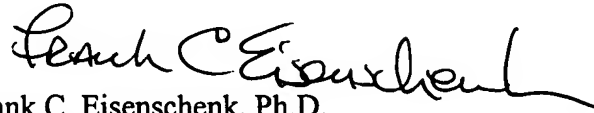
Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed. However, Applicants have not submitted copies of the U.S. patents or U.S. published application cited on attached Form PTO/SB/08 pursuant to the Notice at 1276 OG 55 waiving the requirement set forth at 37 CFR 1.98(a)(2)(i).

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



Frank C. Eisenschenk, Ph.D.

Patent Attorney

Registration No. 45,332

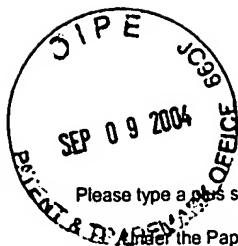
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Attachments: Form PTO/SB/08; copies of references cited therein



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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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### Complete if Known

Application Number	10/051,681
Filing Date	January 16, 2002
First Named Inventor	Daniel Cohen
Group Art Unit	1637
Examiner Name	Kenneth R. Horlick
Attorney Docket Number	G-101US05REG

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U1	4,279,917		Takami <i>et al.</i>	07-21-1981	All
	U2	4,491,589		Dell <i>et al.</i>	01-01-1985	All
	U3	4,604,286		Kawajiri	08-05-1986	All
	U4	5,605,818		Katsumata <i>et al.</i>	02-25-1997	All
	U5	6,013,672		Ye <i>et al.</i>	01-11-2000	All
	U6	6,084,084		Stormann <i>et al.</i>	07-04-2000	All
	U7	6,001,575		Huganir <i>et al.</i>	12-14-1999	All
	U8	6,362,226		Phillips, III <i>et al.</i>	03-26-2002	All
	U9	5,789,444		Choi <i>et al.</i>	08-04-1998	All
	U10	5,447,948		Seibyl <i>et al.</i>	09-05-1995	All
	U11	5,089,517		Choi <i>et al.</i>	02-18-1992	All
	U12	5,670,539		Richardson	09-23-1997	All
	U13	6,620,850	B2	Martynyuk <i>et al.</i>	09-16-2003	All
	U14	2003/0216472	A1	Martynyuk <i>et al.</i>	11-20-2003	All
	U15					
	U16					
	U17					

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	F1	WO	03/024443	A1	Univ. of Florida	03-27-2003	All	
	F2							
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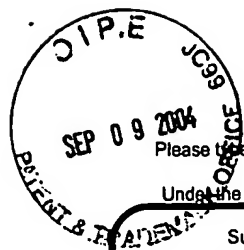
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/051,681
Filing Date	January 16, 2002
First Named Inventor	Daniel Cohen
Group Art Unit	Kenneth R. Horlick
Examiner Name	1637
Attorney Docket Number	G-101US05REG

Sheet 2 of 4

### NON PATENT LITERATURE DOCUMENTS

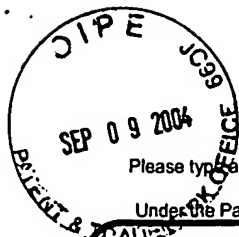
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	R1	CHIARONI, P. <i>et al.</i> "A multivariate analysis of red blood cell membrane transports and plasma levels of L-Tyrosine and L-Tryptophan in depressed patients before treatment and after clinical improvement" <i>Neuropsychobiology</i> , 1990, 23:1-7.	
	R2	DOLLINS, A.B. <i>et al.</i> "L-Tyrosine ameliorates some effects of lower body negative pressure stress" <i>Physiology &amp; Behavior</i> , 1995, 57(2):223-230.	
	R3	EATON, S.A. <i>et al.</i> "Competitive antagonism at metabotropic glutamate receptors by (S)-4-carboxyphenylglycine and (RS)- $\alpha$ -methyl-4-carboxyphenylglycine" <i>European Journal of Pharmacology-Molecular Pharmacology Section</i> , 1993, 244:195-197.	
	R4	GAGLIARDI, R.J. "Neuroprotection, excitotoxicity and NMDA antagonists" <i>Arq Neuropsiquiatr</i> , 2000, 58(2-B):583-588.	
	R5	GALLOWAY, G.P. <i>et al.</i> "A historically controlled trial of tyrosine for cocaine dependence" <i>Journal of Psychoactive Drugs</i> , July-September 1996, 28(3):305-309.	
	R6	GELENBERG, A.J. <i>et al.</i> "Neurotransmitter precursors for the treatment of depression" <i>Psychopharmacology Bulletin</i> , January 1982, 18(1):7-18.	
	R7	HAJAK, G. <i>et al.</i> "The influence of intravenous L-Tryptophan on plasma melatonin and sleep in men" <i>Pharmacopsychiat.</i> , 1991, 24:17-20.	
	R8	HELLER, B. <i>et al.</i> "Therapeutic action of D-phenylalanine in Parkinson's Disease" <i>Arzneim.-Forsch (Drug Res.)</i> , 1976, 26(4):577-579.	
	R9	HOLLMANN, M. <i>et al.</i> "Cloned Glutamate Receptors" <i>Annu. Rev. Neurosci.</i> , 1994, 17:31-108.	
	R10	KNOPFEL, T. <i>et al.</i> "Metabotropic glutamate receptors: Novel targets for drug development" <i>Journal of Medicinal Chemistry</i> , April 1995, 38(9):1417-1426.	
	R11	MAIESE, K. <i>et al.</i> "Group I and Group II metabotropic glutamate receptor subtypes provide enhanced neuroprotection" <i>Journal of Neuroscience Research</i> , 2000, 62:257-272.	
	R12	MEYER, J.S. <i>et al.</i> "Neurotransmitter precursor amino acids in the treatment of multi-infarct Dementia and Alzheimer's Disease" <i>Journal of the American Geriatrics Society</i> , July 1977, 25(7):289-298.	
	R13	OBRENOVITCH, T.P. "Excitotoxicity in neurological disorders—the glutamate paradox" <i>Int. J. Devl. Neuroscience</i> , 2000, 18:281-287.	

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First Named Inventor	Daniel Cohen
Group Art Unit	Kenneth R. Horlick
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Sheet 3 of 4

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R14	SAPOLSKY, R.M. "Cellular defenses against excitotoxic insults" <i>Journal of Neurochemistry</i> , 2001, 76:1601-1611.	
	R15	SCHOEPP, D.D. <i>et al.</i> "Metabotropic glutamate receptors in brain function and pathology" <i>TIPS</i> , January 1993, 14:13-20.	
	R16	SEKIYAMA, N. <i>et al.</i> "Structure-activity relationships of new agonists and antagonists of different metabotropic glutamate receptor subtypes" <i>British Journal of Pharmacology</i> , 1996, 117:1493-1503.	
	R17	WATKINS, J. <i>et al.</i> "Phenylglycine derivatives as antagonists of metabotropic glutamate receptors" <i>TIPS</i> , September 1994, 15:333-342.	
	R18	ZIPFEL, G.J. <i>et al.</i> "Neuronal apoptosis after CNS injury: The roles of glutamate and calcium" <i>Journal of Neurotrauma</i> , 2000, 17(10):857-869.	
	R19	BELARDINELLI, L. <i>et al.</i> "1,3-Dipropyl-8-[2-(5,6-Epoxy)Norbornyl]Xanthine, a Potent, Specific and Selective A <sub>1</sub> Adenosine Receptor Antagonist in the Guinea Pig Heart and Brain and in DDT <sub>1</sub> MF-2 Cells" <i>J. Pharmacol. Exp. Ther.</i> , 1995, 275(3):1167-1176.	
	R20	CHOI, D.W. "Excitotoxic Cell Death" <i>J. Neurobiol.</i> , 1992, 23(9):1261-1276.	
	R21	DENNIS, D.M. <i>et al.</i> "Homologous Desensitization of the A <sub>1</sub> -Adenosine Receptor System in the Guinea Pig Atrioventricular Node" <i>J. Pharmacol. Exp. Ther.</i> , 1995, 272(3):1024-1035.	
	R22	KOSTYUK, P.G. <i>et al.</i> "Effects of intracellular administration of L-tyrosine and L-phenylalanine on voltage-operated calcium conductance in PC12 pheochromocytoma cells" <i>Brain Res.</i> , 1991, 550:11-14.	
	R23	KRYSTAL, J.H. <i>et al.</i> "NMDA Agonists and Antagonist as Probes of Glutamatergic Dysfunction and Pharmacotherapies in Neuropsychiatric Disorders" <i>Harv. Rev. Psychiatry</i> , Sept.-Oct. 1999, 7(3):125-143.	
	R24	LIPTON, S.A. and P.A. ROSENBERG "Excitatory Amino Acids as a Final Common Pathway for Neurologic Disorders" <i>N. Engl. J. Med.</i> , 1994, 330(9):613-622.	
	R25	MARTYNYUK, A.E. <i>et al.</i> "Blocking effect of intraperitoneal injection of phenylalanine on high-threshold calcium currents in rat hippocampal neurons" <i>Brain Res.</i> , 1991, 552:228-231.	
	R26	MARTYNYUK, A.E. <i>et al.</i> "Adenosine increases potassium conductance in isolated rabbit atrioventricular nodal myocytes" <i>Cardiovasc. Res.</i> 1995, 30:668-675.	

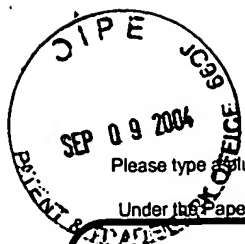
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	R27	MARTYNYUK, A.E. <i>et al.</i> "Hyperkalemia Enhances the Effect of Adenosine on I <sub>K,ADO</sub> in Rabbit Isolated AV Nodal Myocytes and on AV Nodal Conduction in Guinea Pig Isolated Heart" <i>Circulation</i> , 1999, 99:312-318.	
	R28	MOREY, T.E. <i>et al.</i> "Structure-Activity Relationships and Electrophysiological Effects of Short-Acting Amiodarone Homologs in Guinea Pig Isolated Heart" <i>J. Pharmacol. Exp. Ther.</i> , 2001, 297(1):260-266.	
	R29	MOREY, T.E. <i>et al.</i> "Ionic Basis of the Differential Effects of Intravenous Anesthetics on Erythromycin-induced Prolongation of Ventricular Repolarization in the Guinea Pig Heart" <i>Anesthesiology</i> , 1997, 87:1172-1181.	
	R30	SEUBERT, C.N. <i>et al.</i> "Midazolam Selectively Potentiates the A <sub>2A</sub> , but not A <sub>1</sub> , receptor-mediated Effects of Adenosine" <i>Anesthesiology</i> , 2000, 92:567-577.	
	R31	TANAKA, H. <i>et al.</i> "The AMPAR subunit GluR2: still front and center-stage" <i>Brain Res.</i> , 2000, 886:190-207.	
	R32	WEISS, J.H. and S.L. SENSI "Ca <sup>2+</sup> -Zn <sup>2+</sup> permeable AMPA or kainite receptors: possible key factors in selective neurodegeneration" <i>Trends Neurosci.</i> , 2000, 23(8):365-371.	
	R33	ZIMA, A. <i>et al.</i> "Antagonism of the Positive Dromotropic Effect of Isoproterenol by Adenosine: Role of Nitric Oxide, cGMP-dependent camp-phosphodiesterase and Protein Kinase G" <i>J. Mol. Cell. Cardiol.</i> , 2000, 32:1609-1619.	
	R34	GLUSHAKOV, A.V. <i>et al.</i> "L-phenylalanine selectively depresses currents at glutamatergic excitatory synapses" <i>J. Neurosci. Res.</i> , 2003, 72:116-124.	
	R35	GLUSHAKOV, A.V. <i>et al.</i> "Specific inhibition of N-methyl-D-aspartate receptor function in rat hippocampal neurons by L-phenylalanine at concentrations observed during phenylketonuria" <i>Molecular Psychiatry</i> , 2002, 7:359-367.	
	R36	LIECHTY, E.A. <i>et al.</i> "Aromatic amino acids are utilized and protein synthesis is stimulated during amino acid infusion in the ovine fetus" <i>J. Nutrition</i> , 1999, 129:1161-1166.	
	R37		
	R38		
	R39		

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